

HDR



I. ADMINISTRATION

THIS MEETING IS OPEN TO THE PUBLIC

- Noticed in:
 - Scottsbluff Star Herald
 - North Platte Telegraph
 - Sidney Sun-Telegraph
 - Kearney Hub
 - The Grand Island Independent

PARKING LOT OF 2ND INCREMENT

TOPICS

- Drought Conditions
- Revisit the order of goals
- Economic & Social Impacts
- Oversight
- Conjunctive Management (ground AND surface)
- Food & Clean water for future generations
- Monitor Progress (score sheet)
- Storage Capacity & Maintenance
- Have we jumped from fully to over?
- Timeline; number of increments

REVIEW OF THE SPG DECISION- MAKING PROCESS

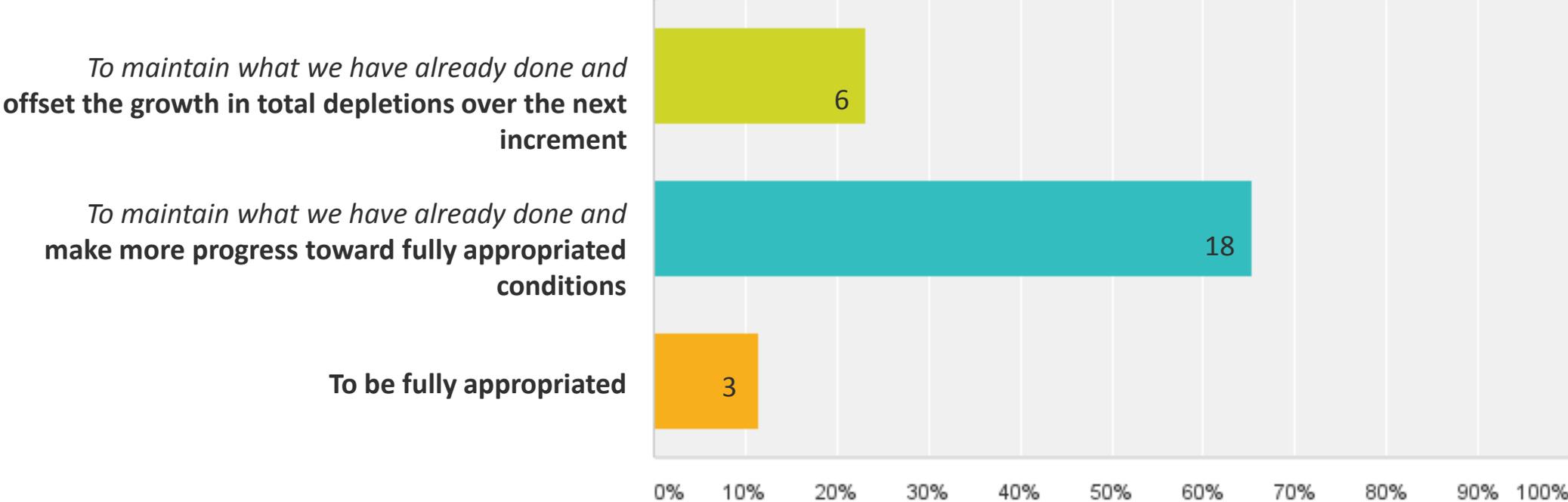
- The first goal is consensus
- A majority vote is the determining factor for all sections of the plan.
- If the group cannot reach a majority, the DNR and the NRDs will work together to resolve the disputed issues.
- If the SPG is unable to come to consensus by June 2018, the DNR and the NRDs will work together to resolve the disputed issues and create a final plan by August 2018.



II. SECOND INCREMENT DISCUSSION

Q1: What should the overall intent of the Second Increment Plan be?

Answered: 27 Skipped: 0



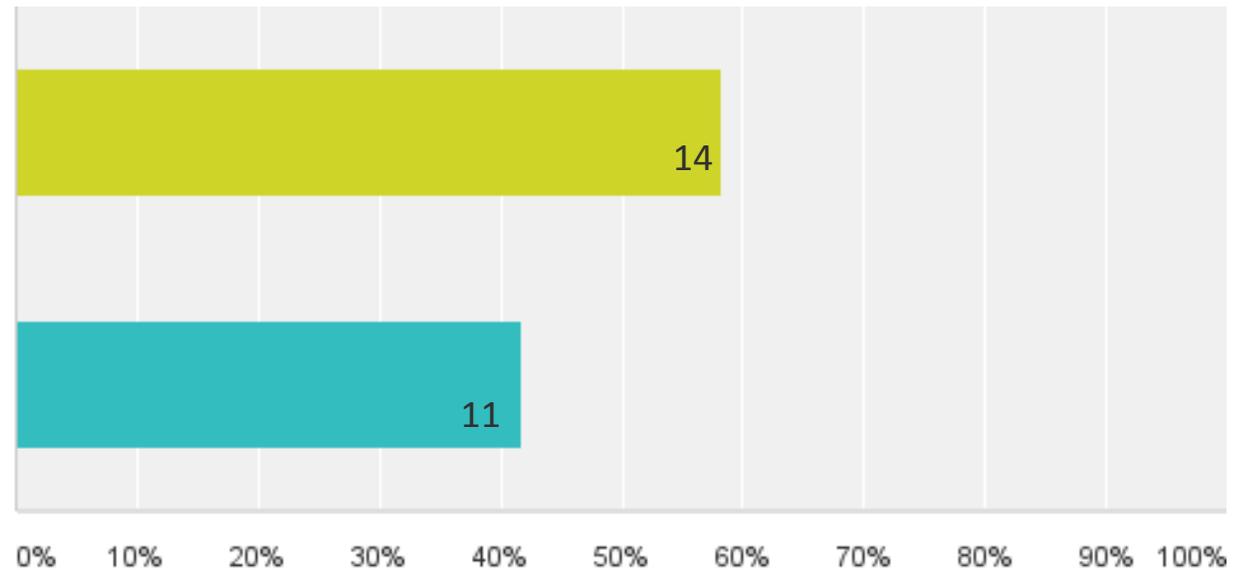
Q2: The benefit of activities undertaken during the first increment to offset post-1997 use depletions are estimated to be in the range of 33,000-110,000 acre-feet annually. What is a reasonable target for additional progress during the second increment?

Answered: 25 Skipped: 2

I do not believe we need to make additional progress.

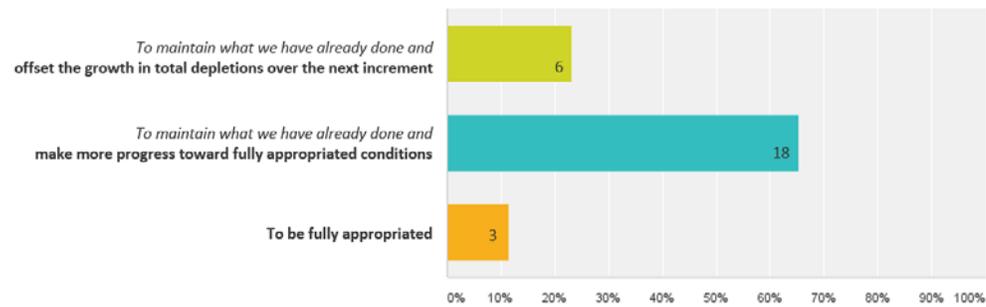
The target for the second increment should be:

- 10,000
- 25,000
- 50,000 (two respondents said this)
- 120,000
- 150,000
- 100,000-150,000
- 33,000-110,000



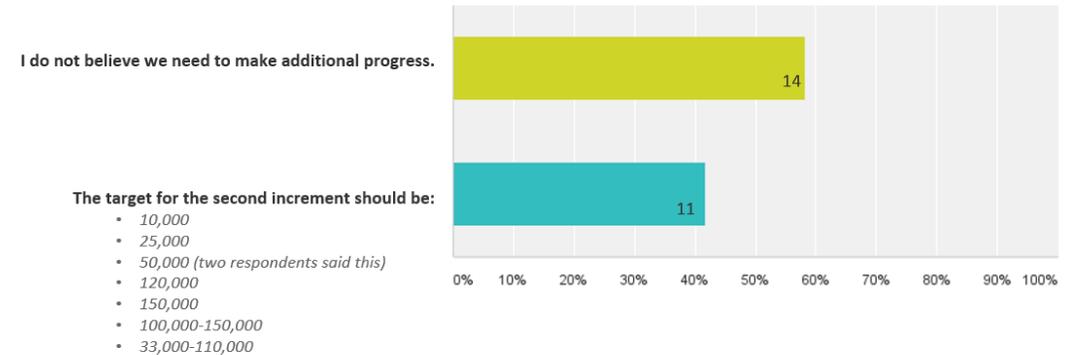
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Answered: 27 Skipped: 0



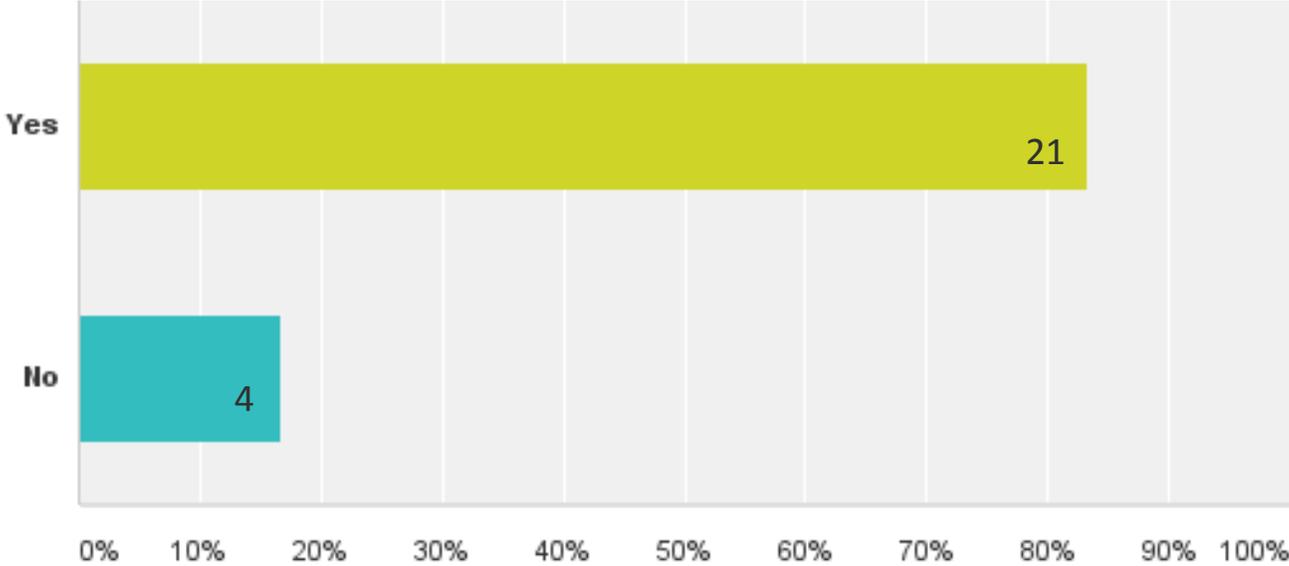
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Answered: 25 Skipped: 2



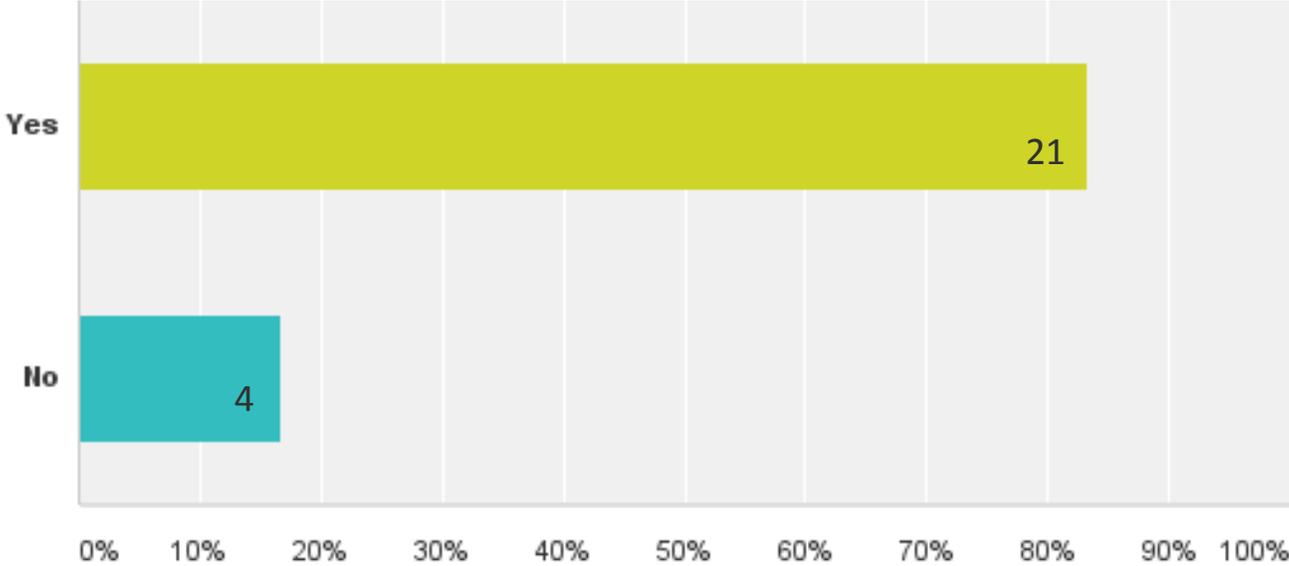
Q3: Does the first increment plan appropriately address the call to maintain the economic viability of the river basin?

Answered: 25 Skipped: 2



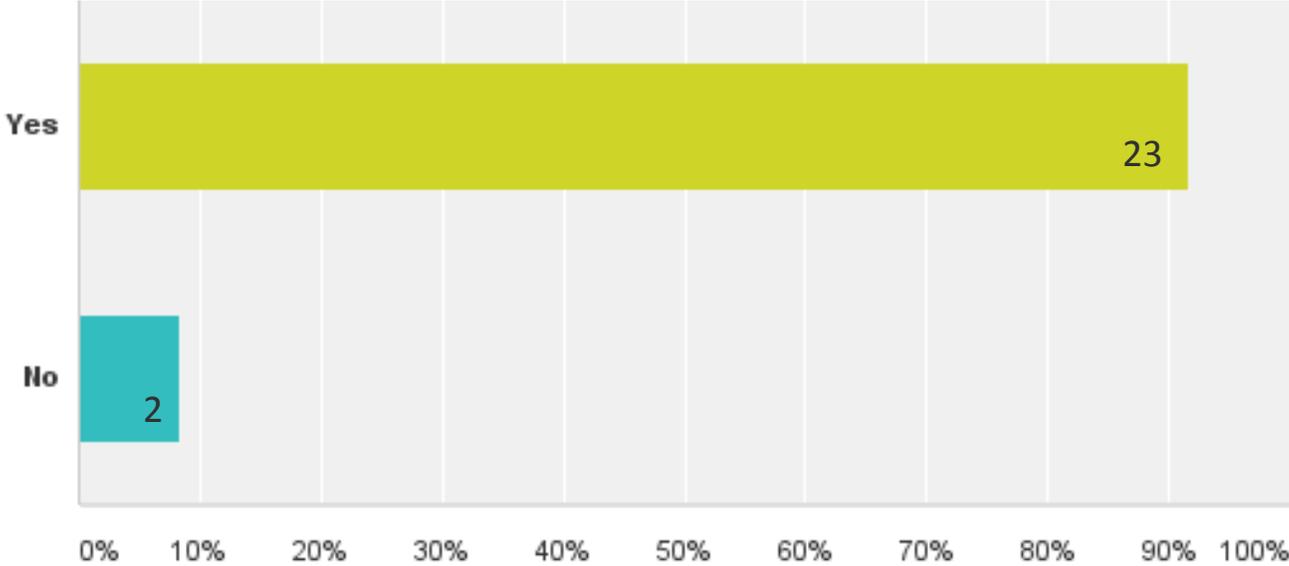
Q4: Does the first increment plan appropriately address the call to maintain the social and environmental health of the river basin?

Answered: 25 Skipped: 2



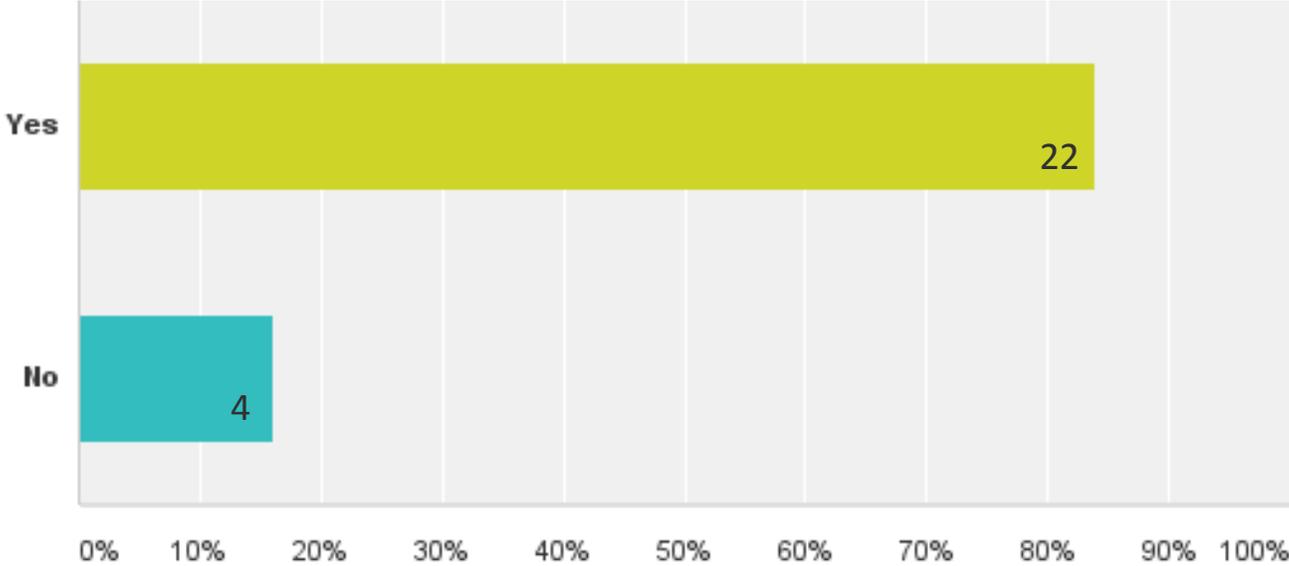
Q5: Does the first increment plan appropriately address the call to maintain the safety of the river basin?

Answered: 25 Skipped: 2



Q6: Does the first increment plan appropriately address the call to maintain the welfare of the river basin?

Answered: 26 Skipped: 1





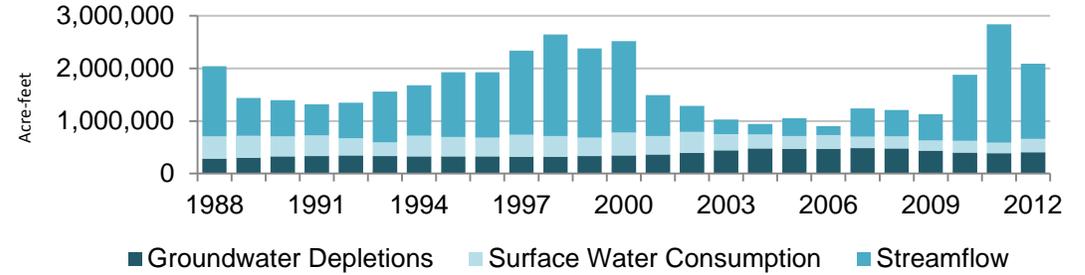
III. BACKGROUND

Overview

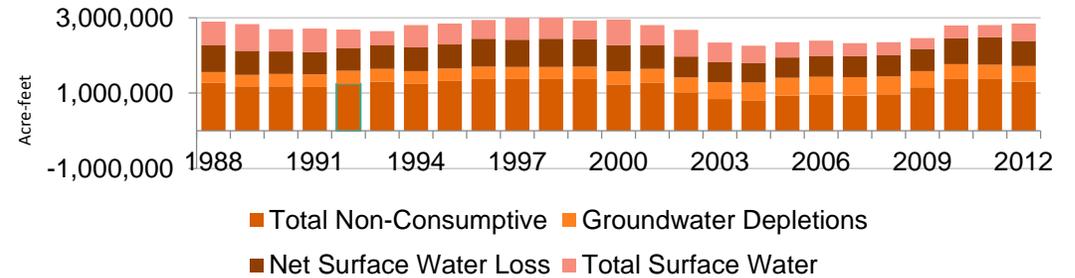
Draft INSIGHT analysis of the Upper Platte River above Odessa.

Current as of 3/1/2017.

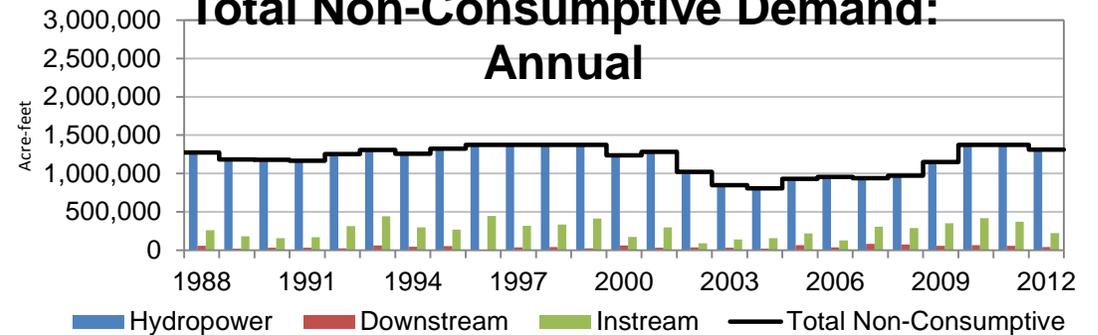
Basin Water Supply: Annual



Total Near-Term Demand: Annual



Total Non-Consumptive Demand: Annual



Balance =

Basin Water Supply – Total Demands

Basin Water Supply =
Streamflow +
Surface Water Consumption +
Groundwater Depletions

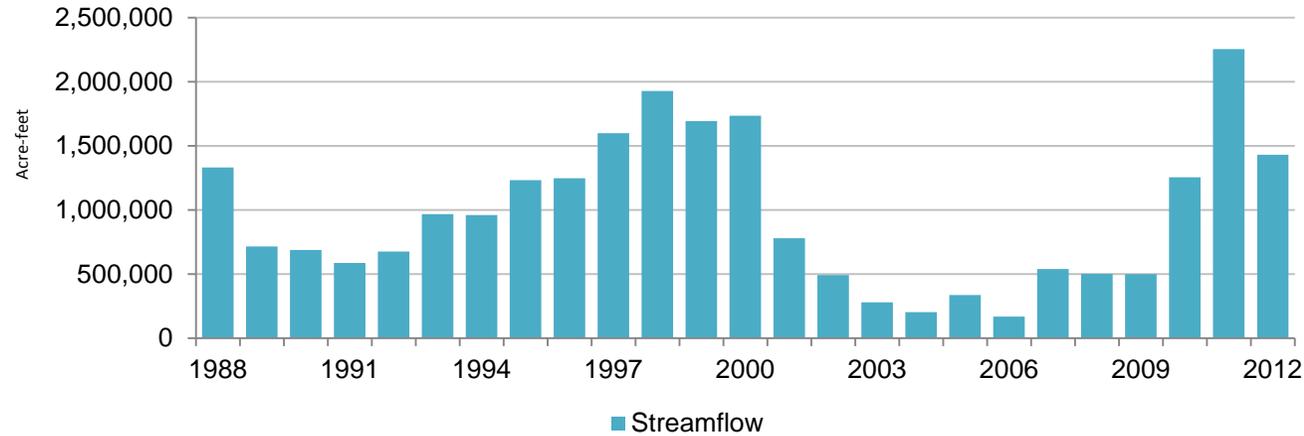
- SUPPLY- Streamflow

Platte River Above Odessa

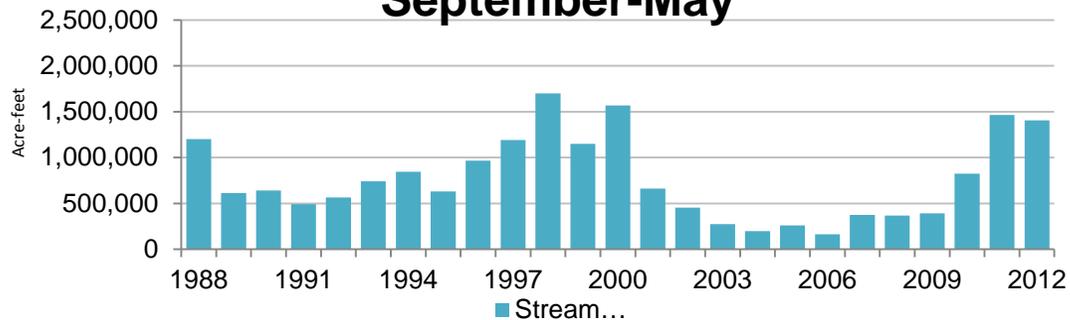
DRAFT

Charts developed using INSIGHT methodology. Analysis performed by HDR. Data current as of 3/1/2017

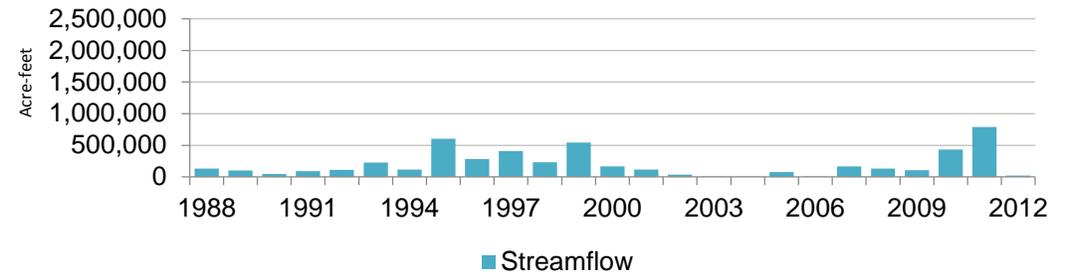
Annual



September-May



June-August

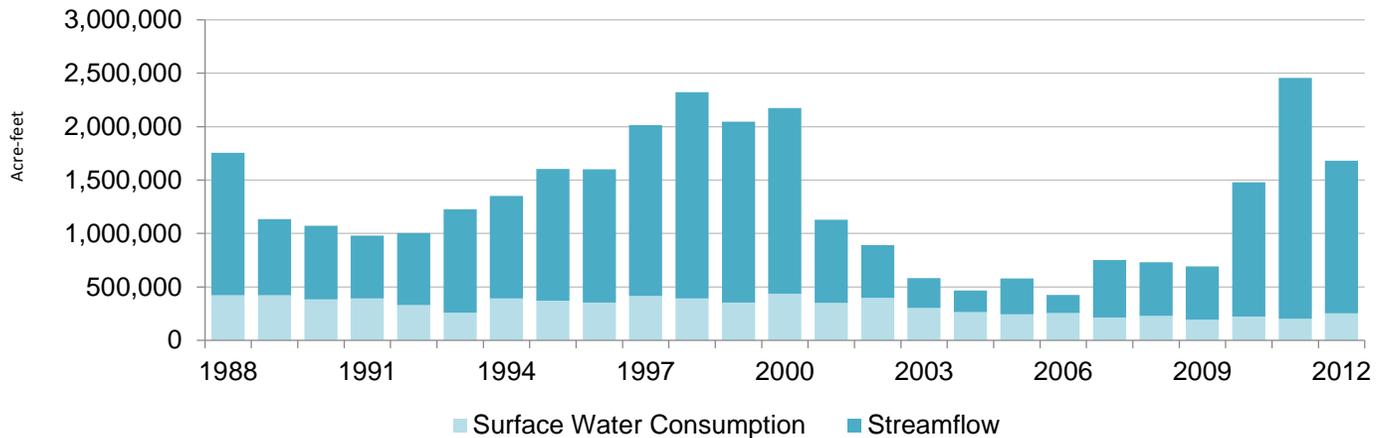


- SUPPLY-

Streamflow + Surface Water Consumption

Platte River Above Odessa

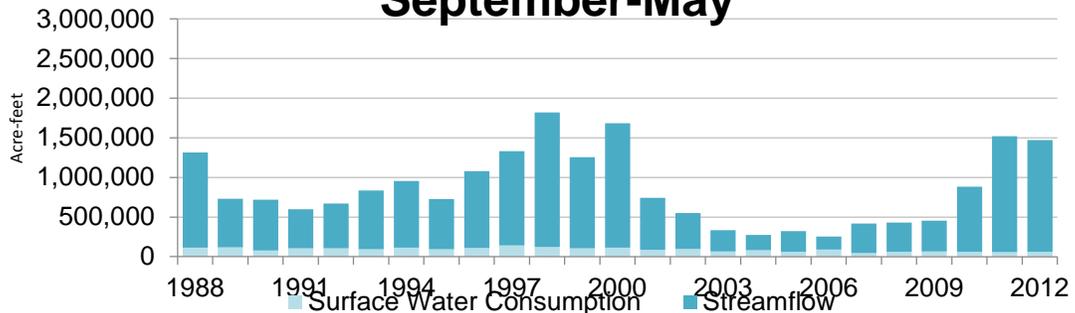
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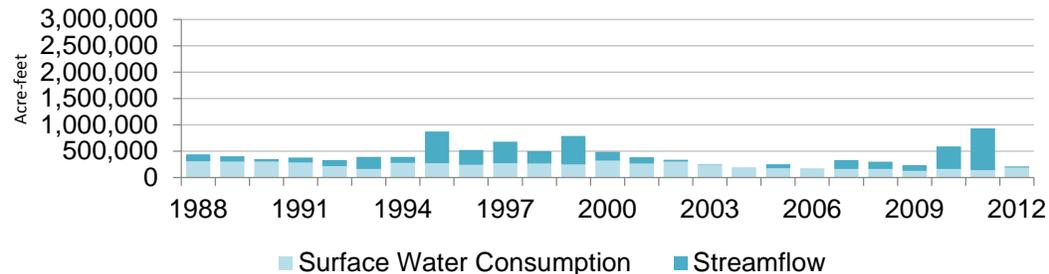
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June-August

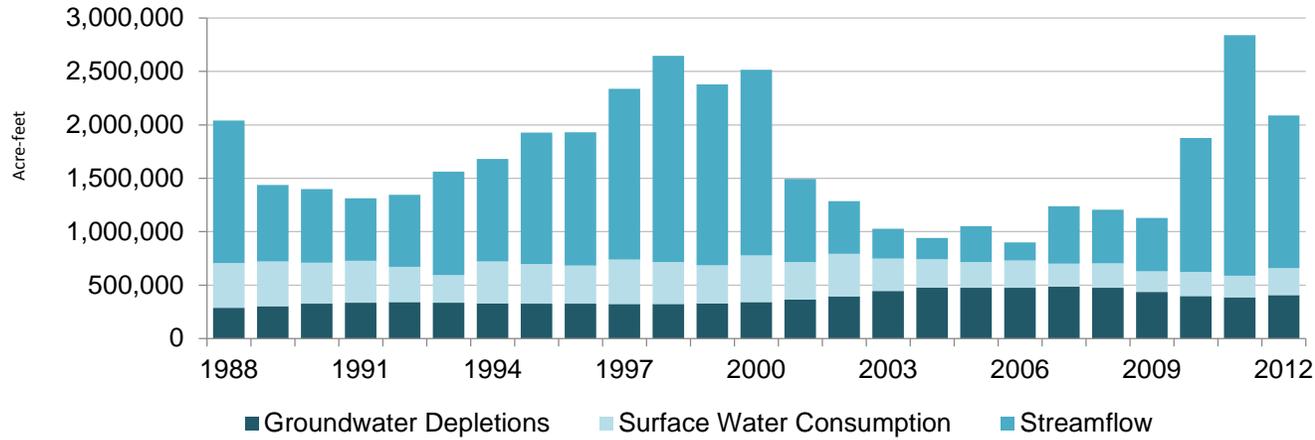


- SUPPLY-

BASIN WATER SUPPLY

Groundwater Depletions + Surface Water Consumption + Streamflow
Platte River Above Odessa

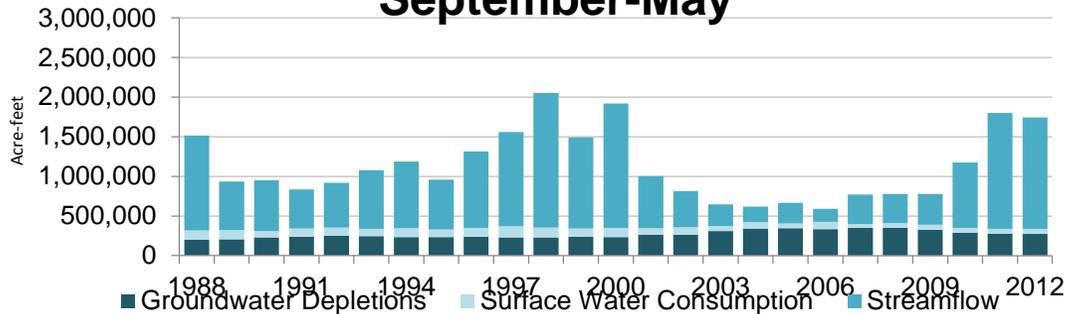
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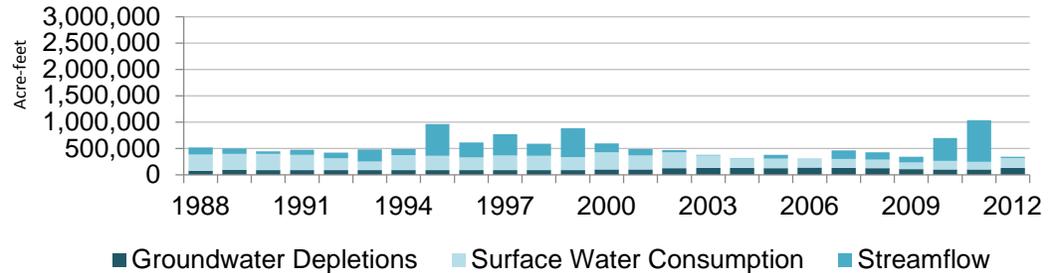
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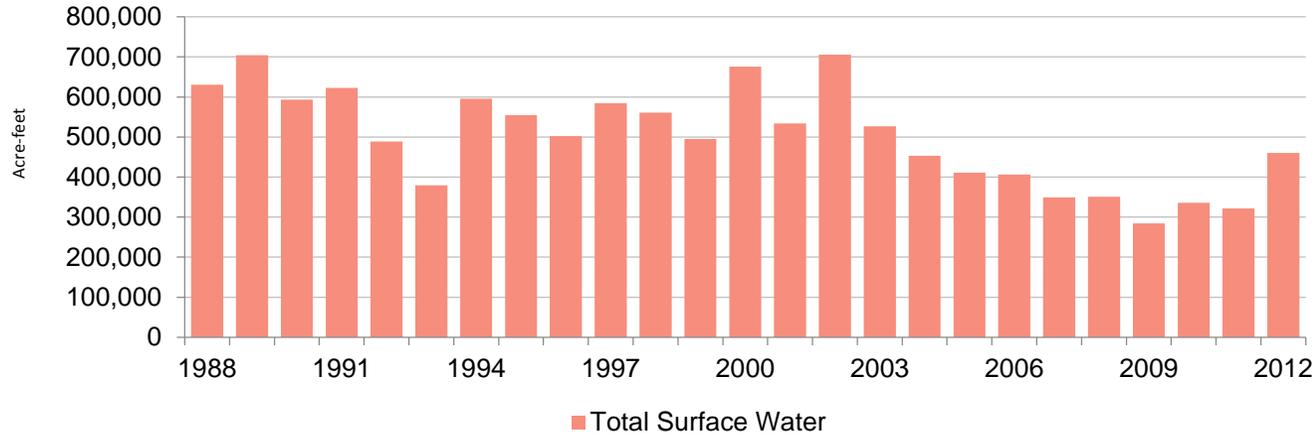
June-August



Total Demand =
Surface Water Demand +
Net Surface Water Loss + Groundwater
Demand +
Non-Consumptive Use Demand

- DEMAND -
Total Surface Water Demand
 Platte River Above Odessa

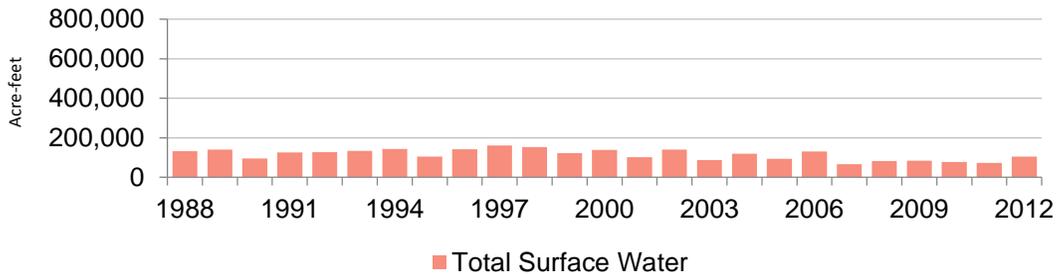
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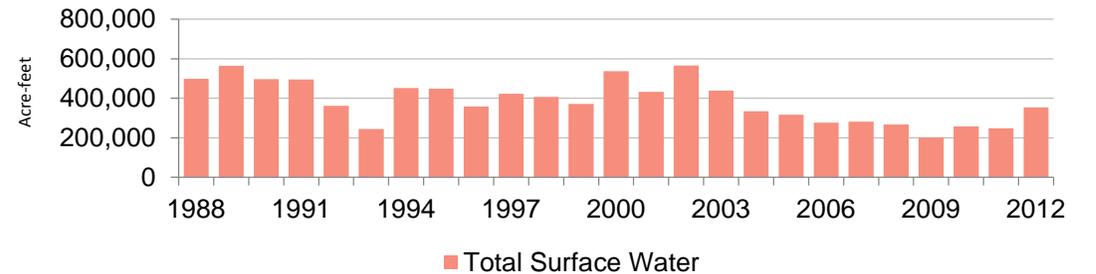
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June-August

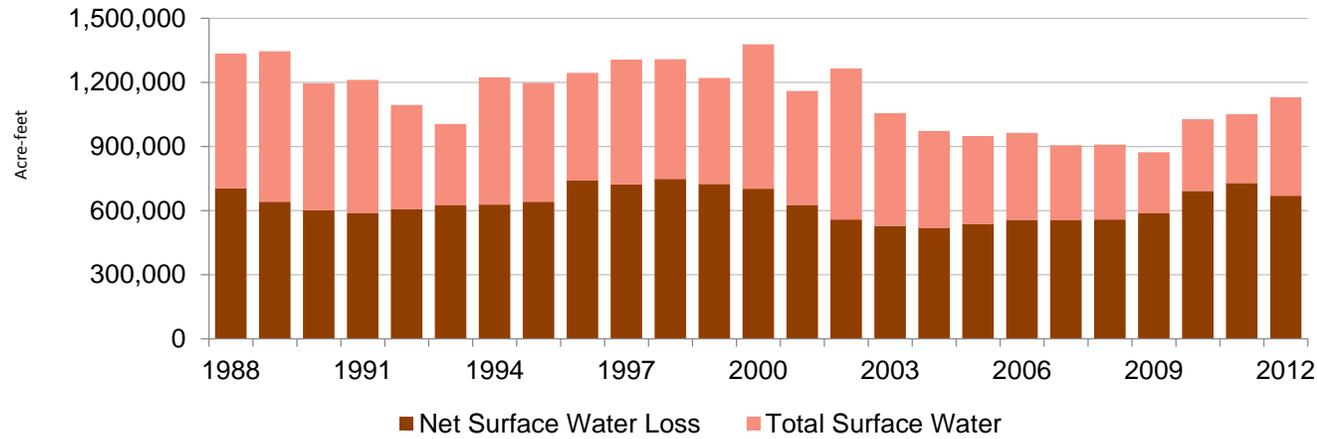


- DEMAND -

Total Surface Water Demand + Net Surface Water Loss

Platte River Above Odessa

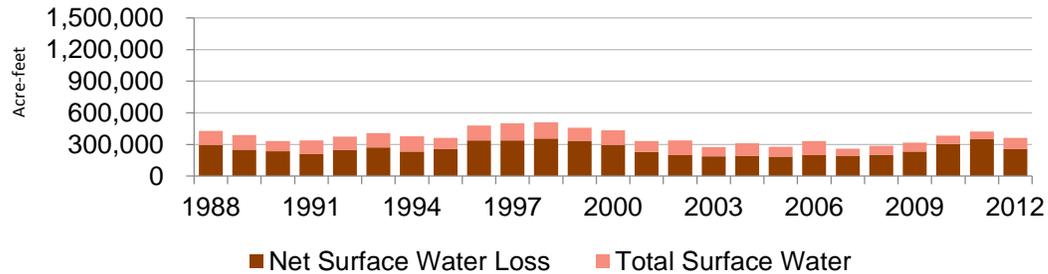
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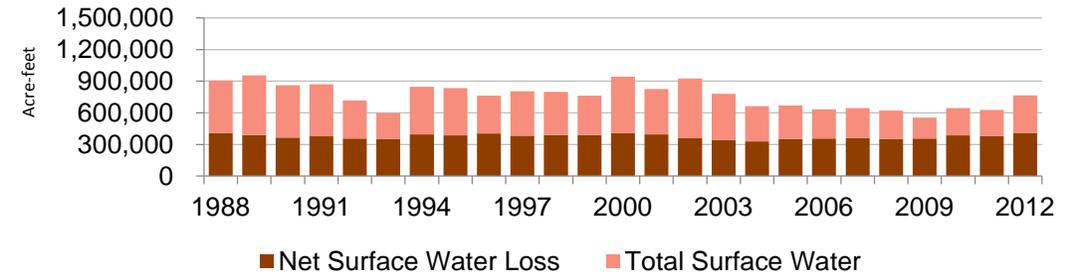
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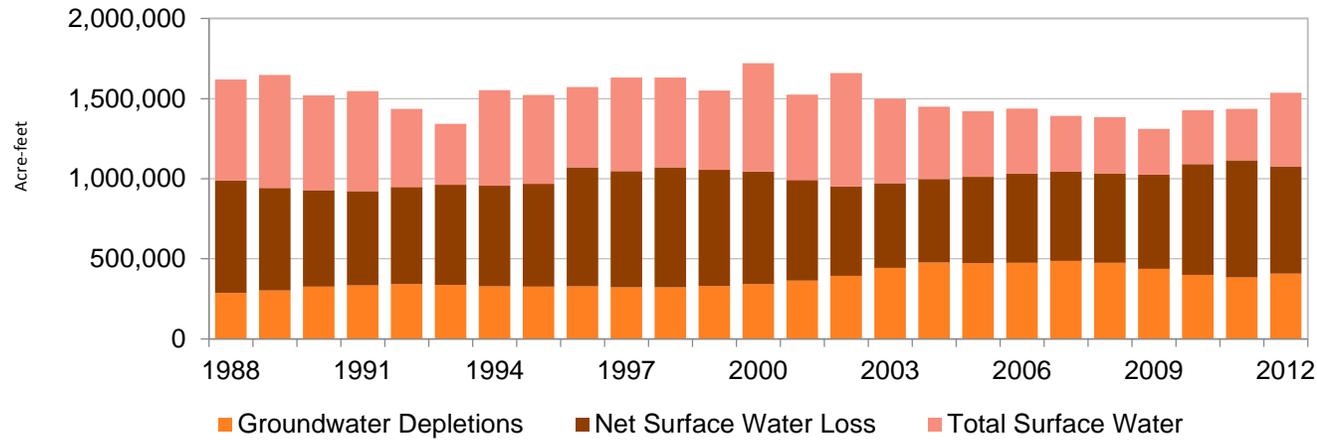


- DEMAND -

Total Surface Water Demand + Net Surface Water Loss + Groundwater Depletions

Platte River Above Odessa

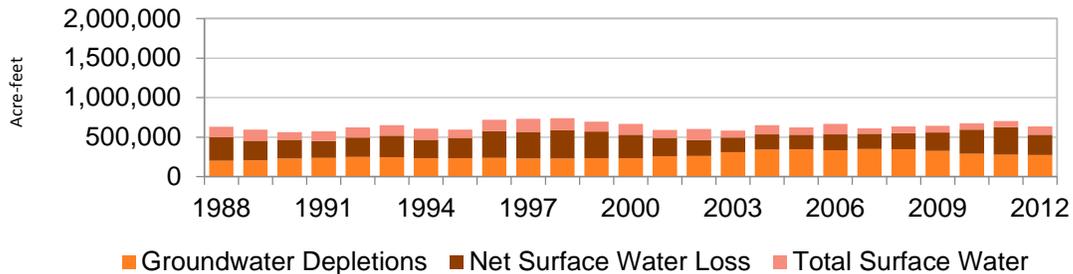
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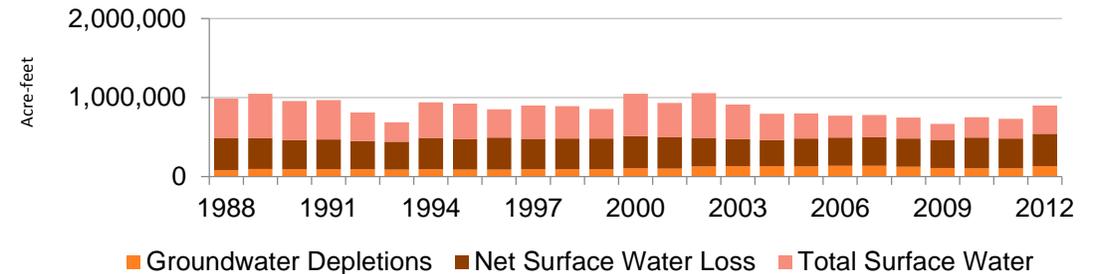
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September-May



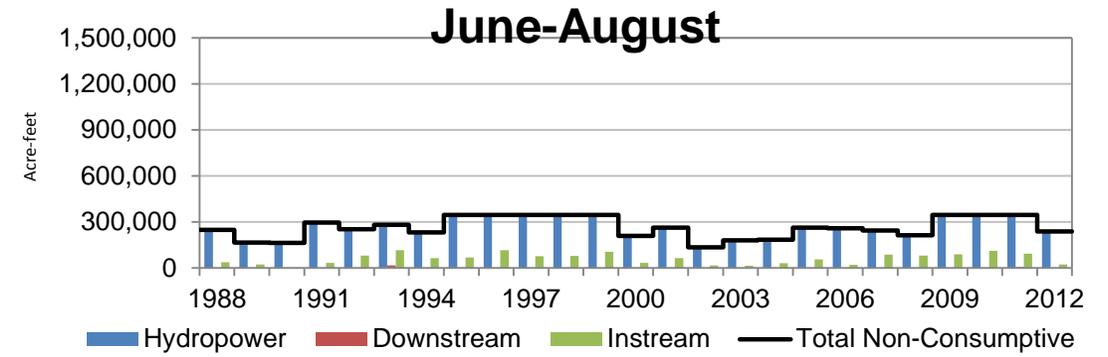
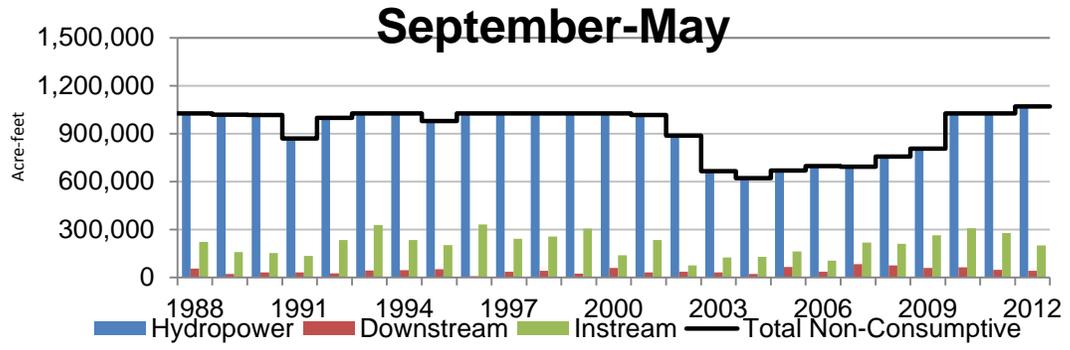
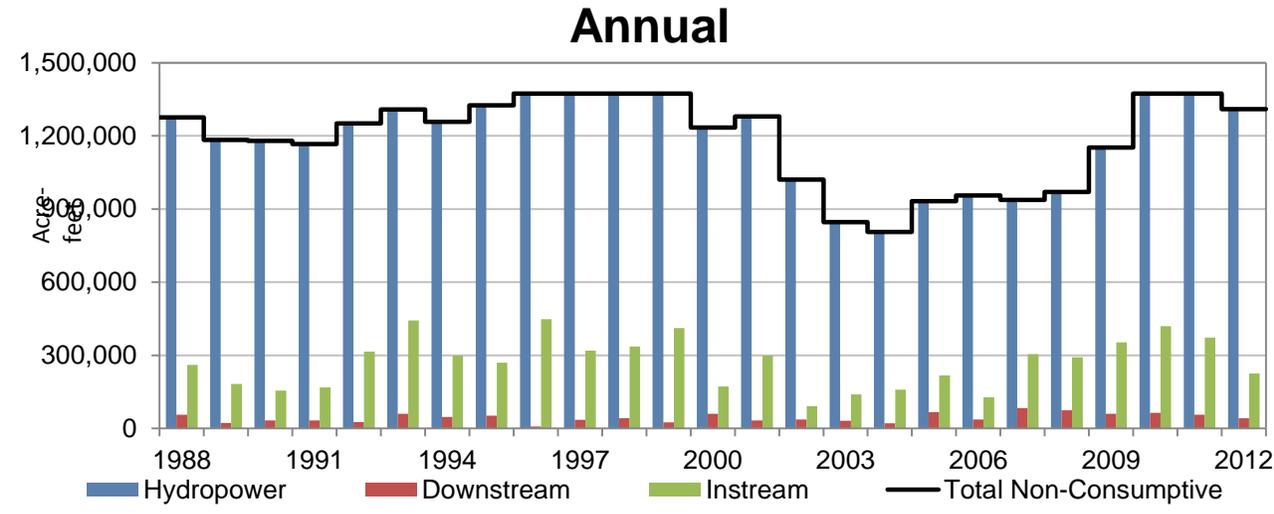
June-August



- DEMAND -
Non-Consumptive Demands
 Platte River Above Odessa

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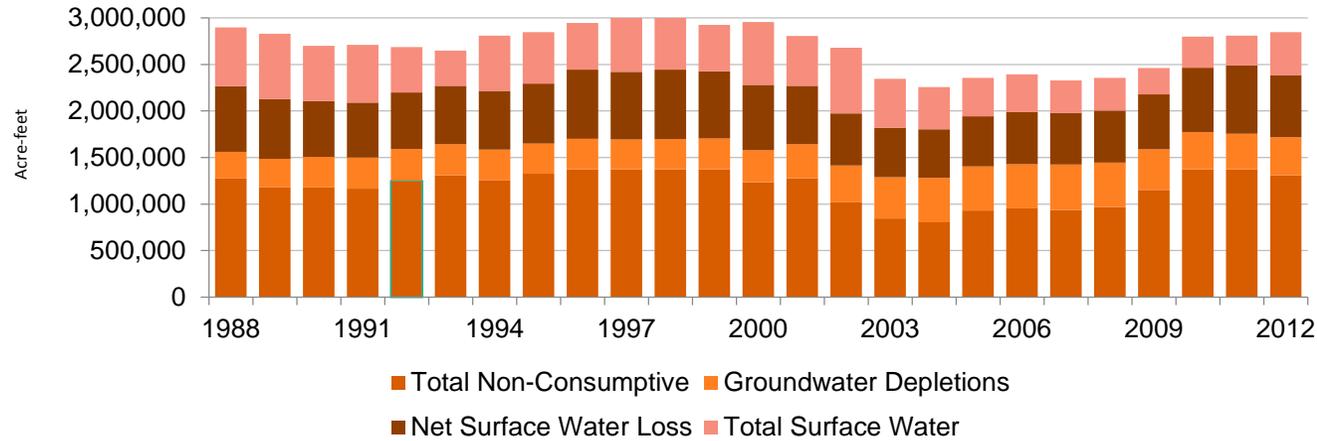
- DEMAND -

TOTAL NEAR-TERM

Net Surface Water Loss + Total Surface Water Demand + Groundwater Depletions + Total Non-consumptive Demand

Platte River Above Odessa

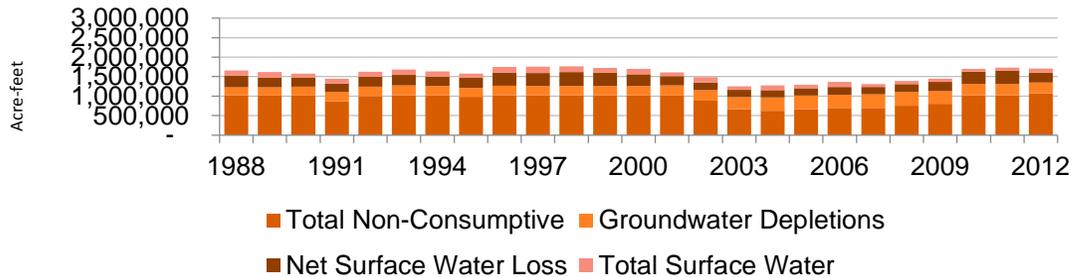
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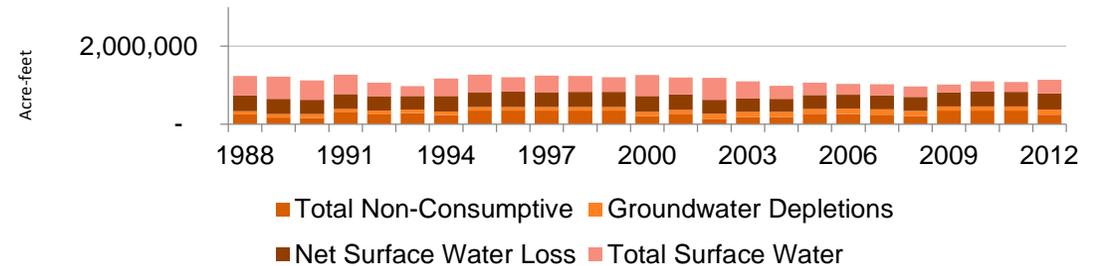
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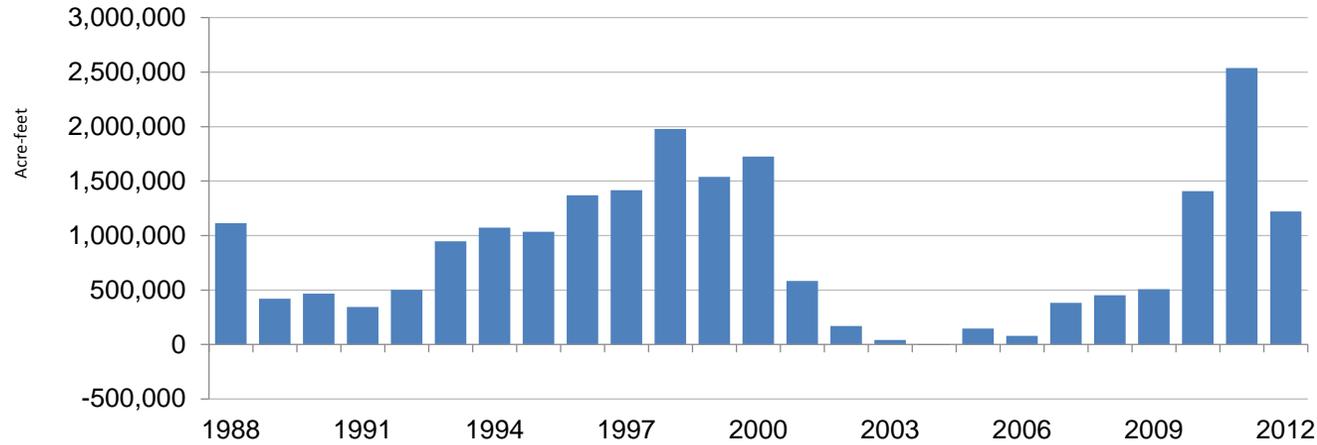
$$\text{Balance} = \text{Basin Water Supply} - \text{Total Demands}$$

Basin Water Supply =
Streamflow +
Surface Water Consumption +
Groundwater Depletions

Total Demands =
Surface Water Demand +
Net Surface Water Loss +
Groundwater Demand +
Non-Consumptive Use Demand

- BALANCE -
Basin Water Supply –
(Surface Water Demands + Groundwater Demands)
 Platte River Above Odessa

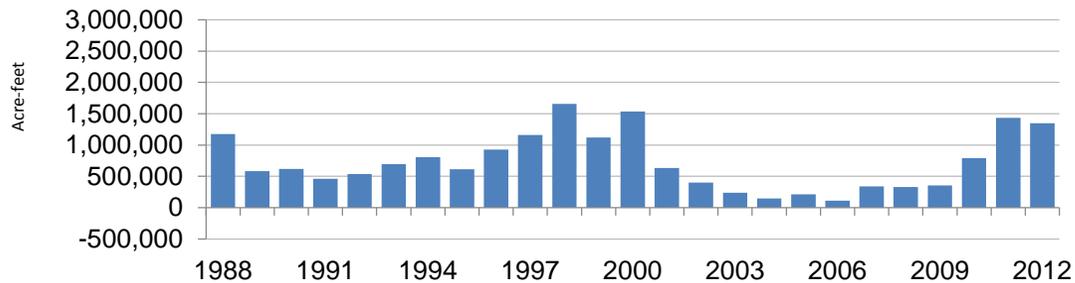
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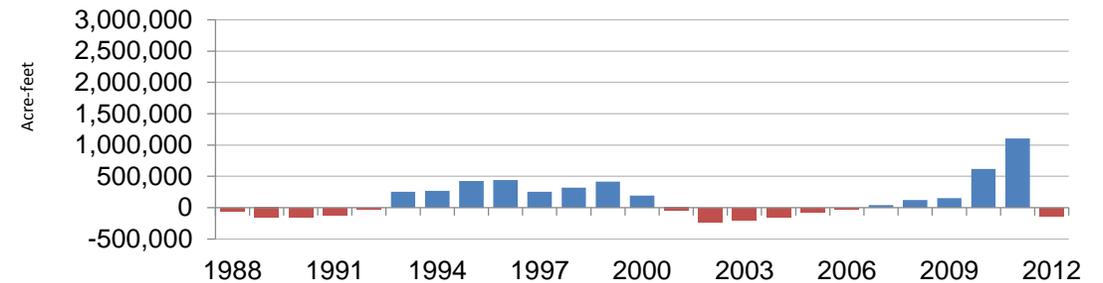
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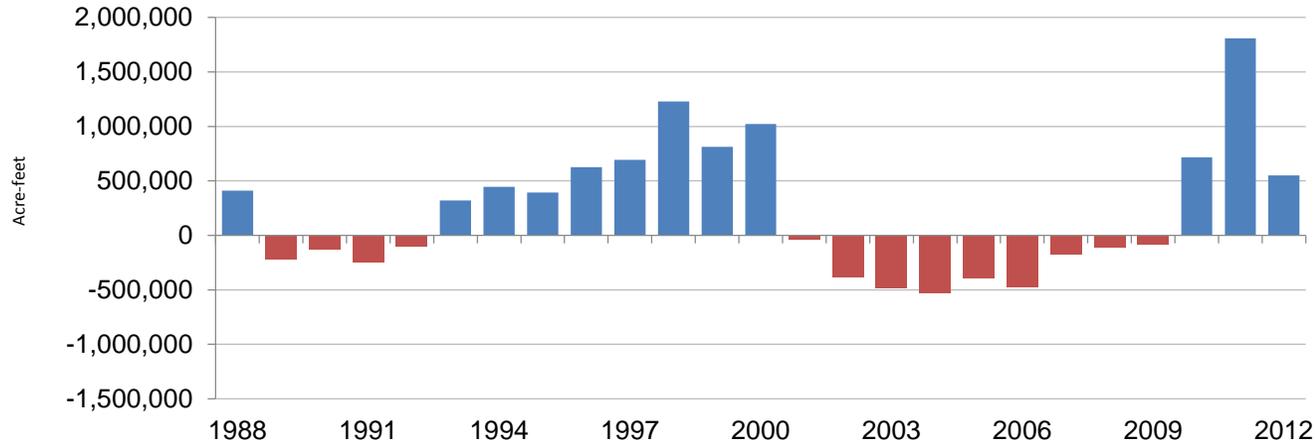


- BALANCE -
Basin Water Supply –
(Surface Water Demands + Near-Term Groundwater Demands + *Net Surface Water Loss*)
 Platte River Above Odessa

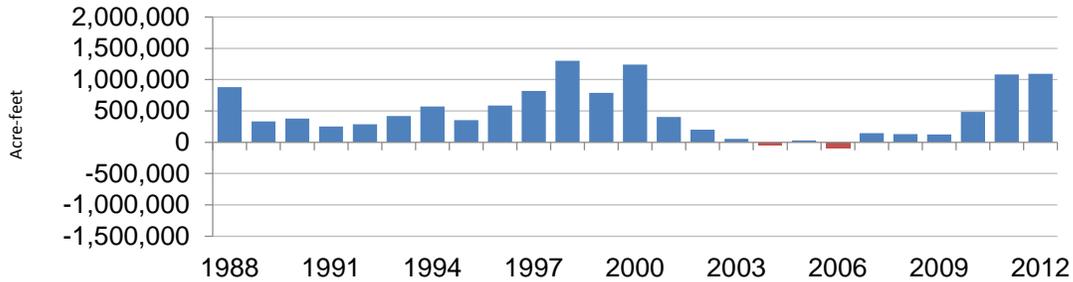
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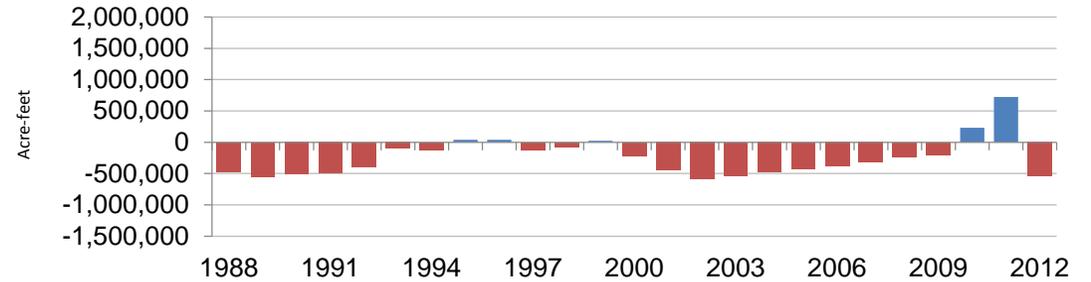
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September-May



June-August

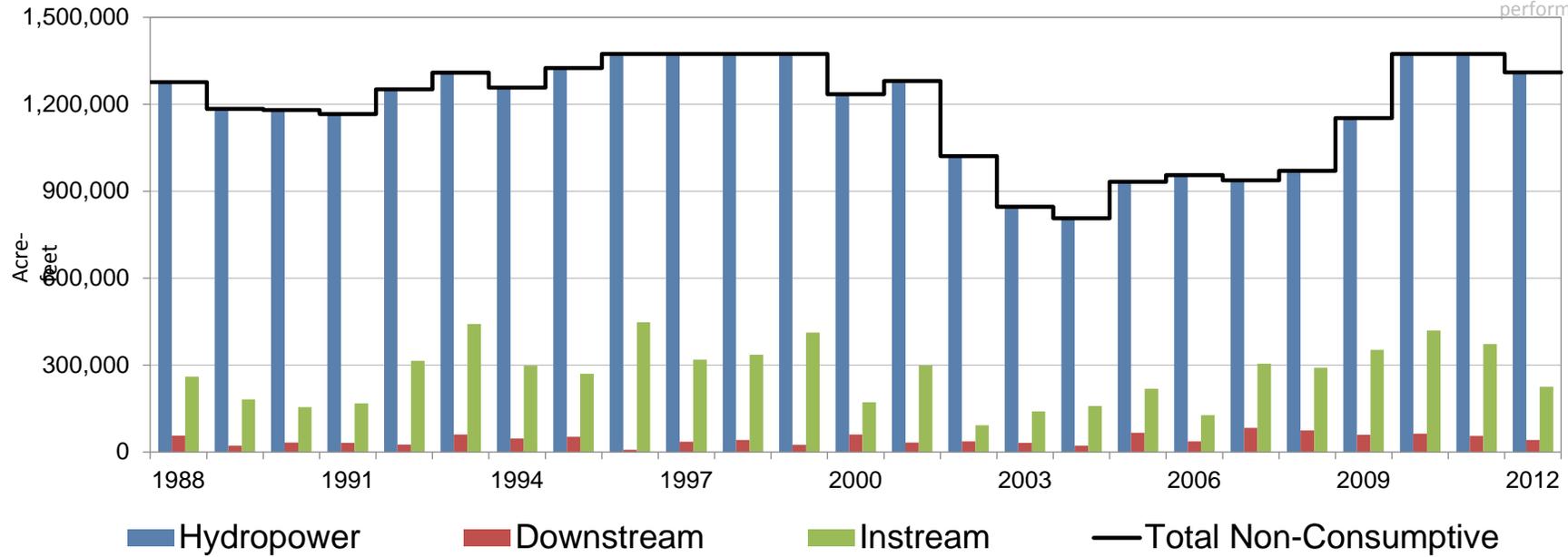


- Recap -
Non-Consumptive Demands
 Platte River Above Odessa

DRAFT

Annual

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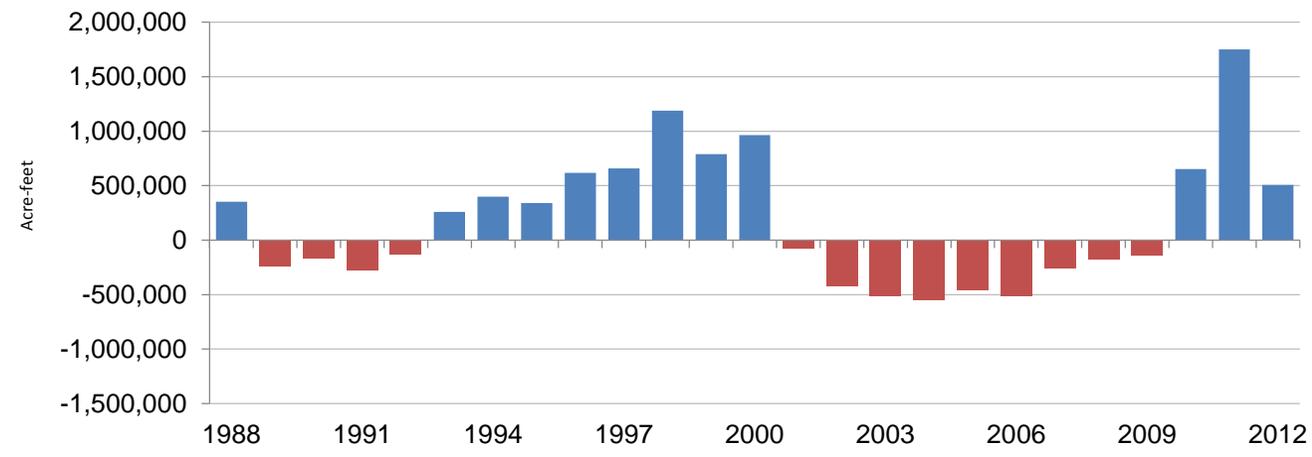


- BALANCE -
Basin Water Supply –
(Surface Water Demands + Near-Term Groundwater Demands + Net Surface Water Loss + *Downstream Demands*)
 Platte River Above Odessa

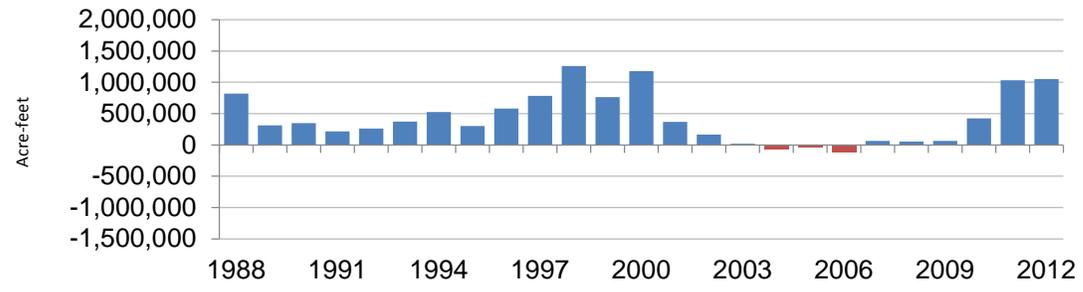
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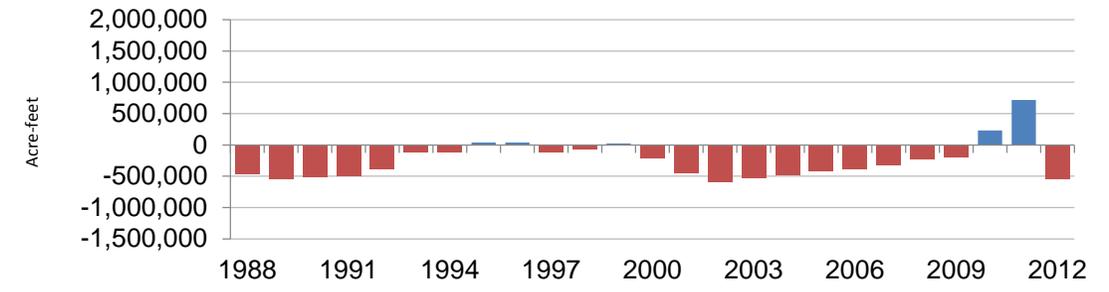
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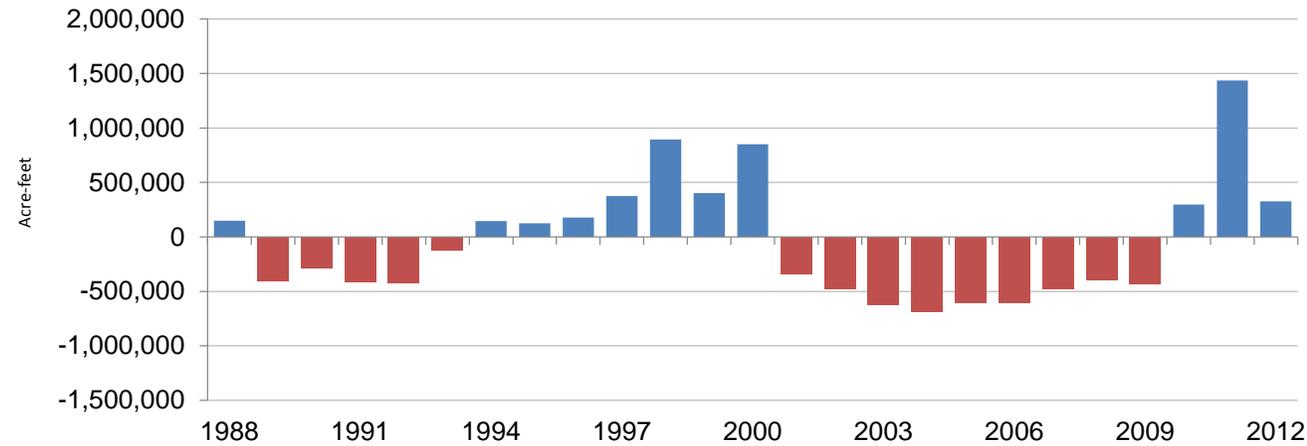


- BALANCE -
Basin Water Supply –
(Surface Water Demands + Near-Term Groundwater Demands + Net Surface Water Loss + *Instream Flow Demands*)
 Platte River Above Odessa

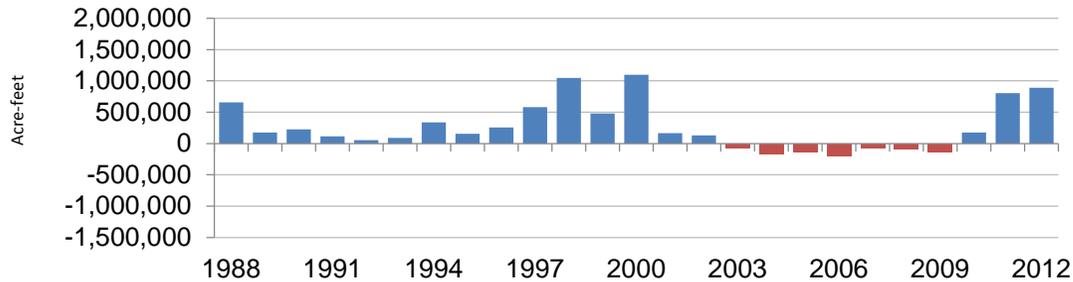
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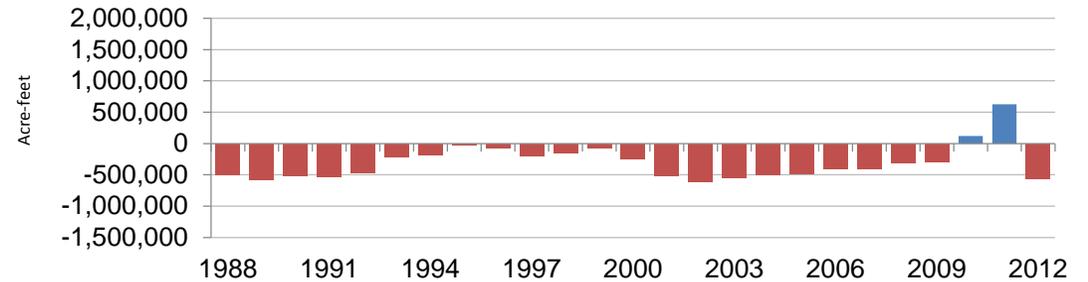
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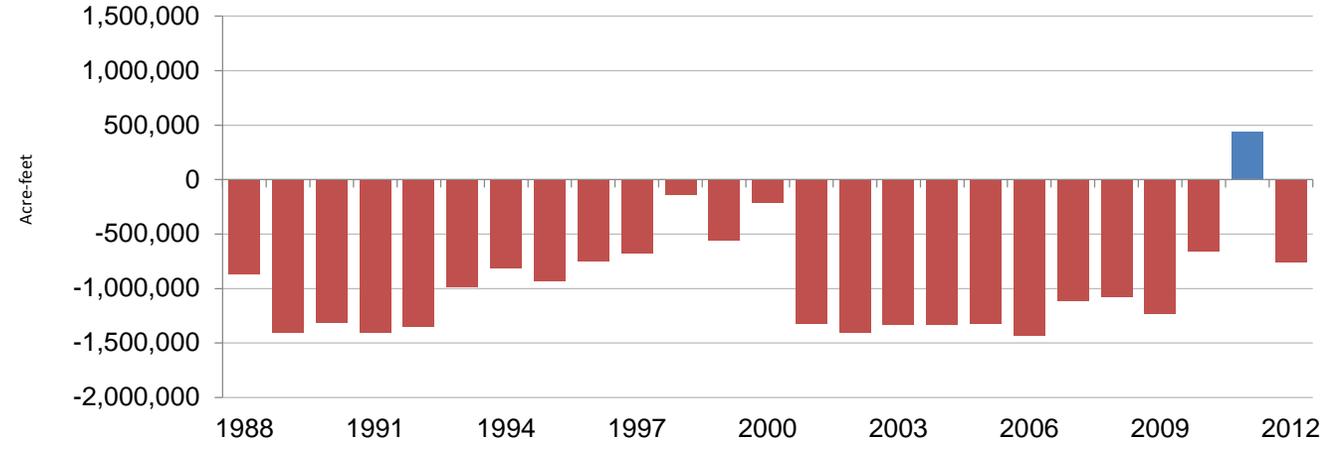


- BALANCE -
Basin Water Supply –
(Surface Water Demands + Near-Term Groundwater Demands + Net Surface Water Loss + *Hydropower Demands*)
 Platte River Above Odessa

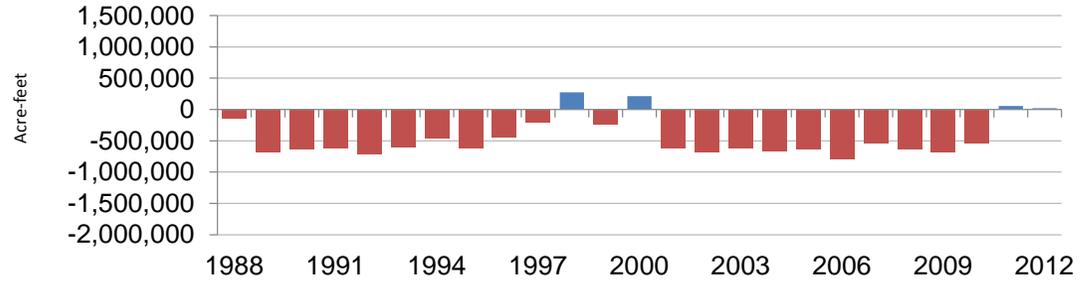
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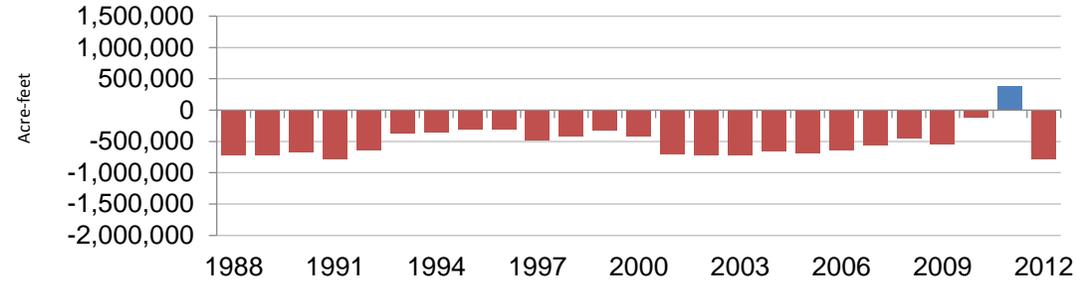
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September-May



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QUESTIONS



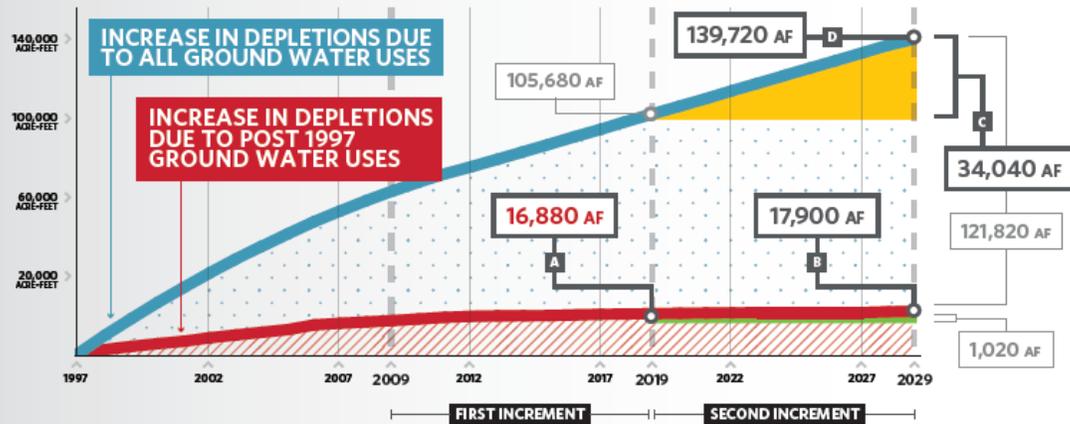
GROWTH IN DEPLETIONS

UPPER PLATTE BASIN

Growth In Depletions

BACKGROUND: The First Increment of the Upper Platte basin-wide plan was adopted in 2009. It is a requirement that a technical analysis of the first basin-wide plan must occur in the ten years following its adoption. This technical analysis is needed to determine the path forward in order to achieve the goals and objectives set for the plan. First Increment efforts also worked to establish the overall difference between current and fully appropriated levels of development.

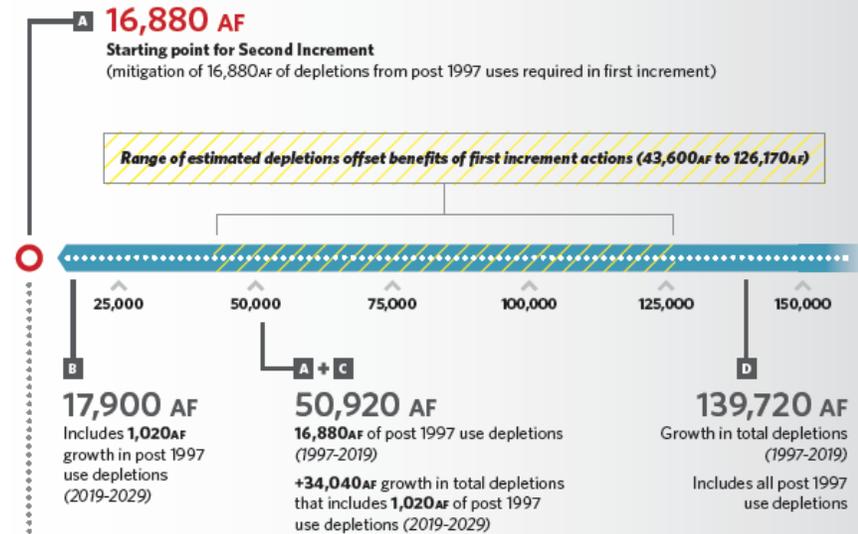
- First Increment depletions offset - post 1997 uses (required by statute)
- Second Increment depletions offset - post 1997 uses (required by statute)
- Depletions due to uses in place prior to 1997
- Growth in depletions during second increment due to all Ground Water use (2019-2029)



Total depletions from all Ground Water uses in 1997 estimated 391,470af. Data used to estimate increases in depletions due to all Ground Water uses is from the results of the most recent COHYST and WWUM models (2015). Data used to estimate increases in depletions due to post-1997 Ground Water uses is from previous analysis conducted by R. R. Luckey (2008). The robust review currently underway will provide updated data for both of these depletions estimates.

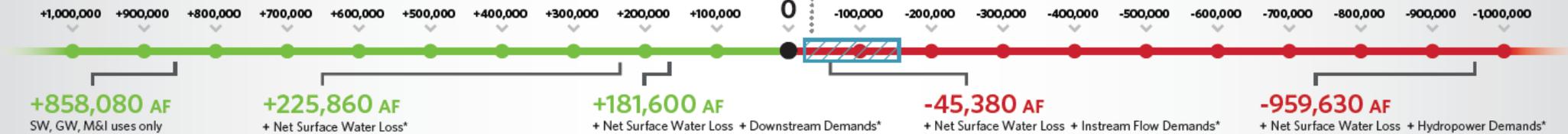
SECOND INCREMENT

The Single Planning Group will help define the progress towards fully appropriated conditions to be made during the second increment.



SUPPLY & DEMAND BALANCE

The Single Planning Group will help define the progress towards fully appropriated conditions to be made during the second increment. The scale below shows values taken from the Basin-Wide Supply and Demand Analysis.



* All figures reflect the average annual difference when comparing supplies with Surface Water (SW), Ground Water (GW), and Municipal and Industrial (M&I) consumptive uses.



IV. NEXT STEPS



V. PUBLIC COMMENT